

Claims

1 An optical inspection apparatus for inspecting the presence or absence of an object to be inspected that causes optical changes such as white turbidity and white sedimentation, or fluorescence for a sample charged in a sample tube, including

 a reaction block in which a plurality of arrangement holes for standing and arranging sample tubes are formed, a light emitting portion for irradiating an inspection light to the respective sample tubes through observation holes formed to the lateral surface or holes formed in the bottom of the reaction block, an image pick-up camera for photographing each of the sample tubes passing through the observation holes, and

 an operation processing device for measuring the optical change caused in the sample tubes based on the luminance distribution or the chromaticity distribution of image data photographed by the image pick-up camera.

2 An optical inspection apparatus according to claim 1, wherein an inspection light is irradiated from the light emitting portion through the holes formed in the bottom of the reaction block to the respective sample tubes, and the white turbidity and white sedimentation caused in the sample are measured as the optical change based on the luminance

distribution or the chromaticity distribution obtained in the image data.

3 An optical inspection apparatus according to claim 1, wherein an excitation light at a wavelength corresponding to a fluorescent material mixed previously with the sample is irradiated as an inspection light and the fluorescence caused in the sample is measured as an optical change based on the luminance distribution or the chromaticity distribution obtained in the image data.

4 An optical inspection apparatus according to claim 1, wherein the observation holes are formed on radial lines from the lens of the image pick-up camera to the respective sample tubes.

5. An optical inspection apparatus according to claim 1, wherein the light emitting devices are disposed at the bottom to the respective arranged holes.